The Dingley Press **Androscoggin County** **Lisbon, Maine** **A-506-70-B-A**	**Departmental** **Findings of Fact and Order** **Part 70 Air Emission License** **Amendment #1**

After review of the Part 70 Amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

FACILITY	The Dingley Press (Dingley)
LICENSE NUMBER	A-506-70-B-A
LICENSE TYPE	Part 70 Minor Modification
SIC CODES	2752
NATURE OF BUSINESS	Commercial Lithographic Printing
FACILITY LOCATION	Lisbon, Maine
DATE OF INITIAL LICENSE ISSUANCE	February 28, 2001
DATE OF AMENDMENT ISSUANCE	November 27, 2001
LICENSE EXPIRATION DATE	February 28, 2001

B. Modification Description

Dingley has proposed removing Press #1 and its associated dryers and installing two new heatset offset lithographic printing presses, Presses #6 and #7.

C. Application Classification

A new emission unit at a major source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Increase Levels" as given in Maine's Air Regulations. The emissions increases for a new source are determined by the maximum future license allowed emissions, as follows:

Pollutant	**Net Change (TPY)**	**Sig. Level**
PM	0.9	25
PM_{10}	0.9	15
SO_2	0.4	40
NO_x	18.6	40
CO	9.1	100
VOC	22.0	40

Therefore, the modification is minor for Dingley.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Presses #6 and #7

Presses #6 and #7 are both Baker Perkins model G-14s. They were built in 1988 and 1986 respectively and both will be installed in 2002. The raw materials that feed Presses #6 and #7 are paper, inks, fountain solution, and blanket wash.

Presses #6 and #7 each have two (2) dryers (total of four dryers). The total heat input of the dryers, on each press, is 10.2 MMBtu/hr firing natural gas or propane.

VOC and HAP emissions from the dryers are controlled by a Wolverine RTO-25,000 thermal oxidizer shared with Presses #3 and #5. The thermal oxidizer is operated at a temperature greater than 1300^{o}F to ensure 99% destruction of VOCs and HAPs. To demonstrate compliance with the temperature limit, Dingley has installed thermocouples and computer interlocks which shut down all presses venting to the thermal oxidizer if the temperature falls below 1300^{o}F. The temperature is also verified and recorded manually once per day. Dingley has investigated installing a data acquisition system to continuously record the temperature in the thermal oxidizer. This system was found to be cost prohibitive.

Because the interlocks prevent operation of the presses if the temperature falls below the required threshold and temperature is verified once daily by manual checks, the Department has determined that Dingley is providing adequate assurance that standards will not be violated.

A summary of the BACT analysis for Presses #6 and #7 is the following:

1. Emissions contained in the dryers shall vent to a thermal oxidizer that will achieve 99% destruction of VOCs based on 800 ppmv or higher VOC inlet measured as propane at actual air stream conditions. If the inlet VOC content is below 800 ppmv, the VOC outlet shall not exceed 25 ppmv at actual stack conditions.
2. Dingley shall fire propane or natural gas in the dryers for Presses #6 and #7 and the thermal oxidizer.

D. Facility Emissions

Total Allowable Annual Emissions for the Facility
(used to calculate the license fee)

Pollutant	Tons/Year
PM	2.5
PM_{10}	2.5
SO_2	1.8
NO_x	36.6
CO	27.3
VOC	82.1
HAP (any single)	9.9
HAP (combined)	24.9

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants this Part 70 License Minor Modification A-506-70-B-A subject to the conditions found in Air Emission License A-506-70-A-I and in addition to the following conditions.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

The following shall replace Condition (24) of Air Emission License A-506-70-A-I as of March 1, 2002:

(24) Presses #3, #4, #5, #6, and #7

A. Dingley is licensed to operate Presses #3, #4, #5, #6 and #7 and the associated dryers. [MEDEP Chapter 140, BPT]

B. Press #1 shall be taken off line prior to the start up of Presses #6 and #7. [MEDEP Chapter 140, BPT]

C. Dingley shall fire only natural gas or propane in the dryers and the thermal oxidizer. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

D. Emissions from the dryers on Press #4 shall be vented through the catalytic incinerator. [MEDEP Chapter 140, BPT]

E. Emissions from the catalytic incinerator shall not exceed the following limits:

Pollutant	***lb/MMBtu***	***Origin and Authority***	***Enforceability***
PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)	**Federally Enforceable**

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	0.08	MEDEP Chapter 140, BPT	**Enforceable by State-only**
PM_{10}	0.08	MEDEP Chapter 140, BPT	**Enforceable by State-only**
SO_2	0.01	MEDEP Chapter 140, BPT	**Enforceable by State-only**
NO_X	2.15	MEDEP Chapter 140, BPT	**Enforceable by State-only**
CO	0.54	MEDEP Chapter 140, BPT	**Enforceable by State-only**

F. Emissions from Press #4 shall vent to a catalytic incinerator that will achieve 95% destruction of VOCs from the dryers. Compliance shall be demonstrated by stack testing once every two years. After two sets of successful compliance demonstrations, Dingley may apply to reduce the frequency of stack testing required. [MEDEP Chapter 140, BPT]

G. The catalytic incinerator shall maintain a temperature of at least 600^{o}F to ensure destruction of the VOCs. Compliance shall be demonstrated by thermocouples maintained in the incinerator chambers. The catalytic incinerator control system is equipped with interlocks which shut down the presses if the temperature drops below 600^{o}F. The Temperature shall be recorded daily by operators. [MEDEP Chapter 140, BPT]

H. Emissions from the dryers on Presses #3, #5, #6, and #7 shall be vented through the thermal oxidizer. [MEDEP Chapter 140, BPT]

I. Emissions from the thermal oxidizer shall not exceed the following limits:

Pollutant	***lb/MMBtu***	***Origin and Authority***	***Enforceability***
PM	0.12	MEDEP, Chapter 103, Section 2(B)(1)(a)	**Federally Enforceable**

Pollutant	***lb/hr***	***Origin and Authority***	***Enforceability***
PM	0.5	MEDEP Chapter 140, BPT	**Federally Enforceable**
PM_{10}	0.5	MEDEP Chapter 140, BPT	**Federally Enforceable**
SO_2	0.4	MEDEP Chapter 140, BPT	**Federally Enforceable**
NO_X	6.2	MEDEP Chapter 140, BPT	**Federally Enforceable**
CO	5.7	MEDEP Chapter 140, BPT	**Federally Enforceable**

J. Emissions from Presses #3, #5, #6, and #7 shall vent to a thermal oxidizer that will achieve 99% destruction of VOC from the dryers based on 800 ppmv or higher VOC inlet measured as propane at actual air stream conditions. If the inlet VOC content is below 800 ppmv, the VOC outlet shall not exceed 25 ppmv at actual stack conditions. Compliance shall be demonstrated by stack testing once every two years. After two sets of successful compliance demonstrations, Dingley may apply to reduce the frequency of stack testing required. [MEDEP Chapter 140, BPT]

K. The thermal oxidizer shall maintain a temperature of at least 1300^{o}F or the temperature which successful stack testing demonstrates a destruction efficiency of at least 99%. Compliance shall be demonstrated by thermocouples maintained in the incinerator chambers. The thermal oxidizer control system is equipped with interlocks which shut down the presses if the temperature drops below 1300^{o}F. The temperature shall be recorded daily by operators. [MEDEP Chapter 140, BPT]

L. Compliance with particulate matter limits for the catalytic incinerator and thermal oxidizer are on a 1-hour block average basis and shall be demonstrated in accordance with 40 CFR Part 60, Appendix A, Method 5 upon request by the Department. [MEDEP Chapter 140, BPT]

M. Visible emissions from the presses, the thermal oxidizer, and the catalytic incinerator shall each not exceed 10% opacity on a six minute block average basis. [MEDEP Chapter 140, BPT]

Condition (25) of Air Emission License A-506-70-A-I is deleted.

The following shall replace Condition (26) of Air Emission License A-506-70-A-I:

(26) Overall VOC emissions from the facility shall not exceed 82.1 ton/year based on a 12 month rolling total. Dingley shall maintain monthly records to demonstrate compliance with this limit. [MEDEP Chapter 140, BPT]

The following are new Conditions:

(40) This amendment shall expire concurrently with Air Emission License A-506-70-A-I.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2001.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:_____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/25/01
Date of application acceptance: 9/26/01

Date filed with the Board of Environmental Protection: _____

This Order prepared by Lynn Ross, Bureau of Air Quality.